

The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) A rotary fluid machine comprising:
~~a rotation mechanism (20) including:~~
a cylinder (21) having an annular cylinder chamber (50);
an annular piston (22) ~~which is contained~~ disposed in the cylinder chamber (50) to be eccentric to the cylinder, the annular piston dividing (21) and divides the cylinder chamber (50) into an outer working chamber (51) and an inner working chamber (52); and
a blade (23) ~~which is~~ arranged in the cylinder chamber (50) to divide each of the outer and inner working chambers into a high pressure region and a low pressure region, the cylinder (21) and the piston (22) making relative rotations, ~~wherein~~
~~the width T1 of the cylinder chamber (50) having a width that~~ is varied along the a circumference of the cylinder chamber (50) such that ~~the a~~ gap between ~~the a~~ wall surface of the cylinder (21) and ~~the a~~ wall surface of the piston (22) is kept to a predetermined value during the rotations.

2. (Currently Amended) A rotary fluid machine comprising:
~~a rotation mechanism (20) including:~~
a cylinder (21) having an annular cylinder chamber (50);
an annular piston (22) ~~which is contained~~ disposed in the cylinder chamber (50) to be eccentric to the cylinder, the annular piston dividing (21) and divides the cylinder chamber (50) into an outer working chamber (51) and an inner working chamber (52); and

a blade ~~(23)~~ which is arranged in the cylinder chamber ~~(50)~~ to divide each of the outer and inner working chambers into a high pressure region and a low pressure region, the cylinder ~~(21)~~ and the piston ~~(22)~~ making relative rotations without spinning by themselves, wherein

~~the width T2 of the piston (22) has a width that~~ is varied along ~~the~~ a circumference of the piston ~~(22)~~ such that ~~the~~ a gap between ~~the~~ a wall surface of the cylinder ~~(21)~~ and ~~the~~ a wall surface of the piston ~~(22)~~ is kept to a predetermined value during the rotations.

3. (Currently Amended) The rotary fluid machine according to claim 2, wherein ~~the width T1 of the cylinder chamber (50) has a width that~~ is varied along ~~the~~ a circumference of the cylinder chamber ~~(50)~~ such that the gap between the wall surface of the cylinder ~~(21)~~ and the wall surface of the piston ~~(22)~~ is kept to a predetermined value during the rotations.

4. (Currently Amended) The rotary fluid machine according to claim ~~1 or~~ 3, wherein

~~regarding the center line of the blade (23) as~~ has a center line that is a starting point of the circumference of the cylinder chamber ~~(50)~~, ~~the~~ a width ~~T1~~ of a part of the cylinder chamber ~~(50)~~ ranging from the starting point to a point at a rotation angle of 180° from the starting point is large and ~~the~~ a width ~~T1~~ of ~~the other~~ another part of the cylinder chamber ~~(50)~~ ranging from the 180° point to a point at a rotation angle less than 360° from the starting point is small.

5. (Currently Amended) The rotary fluid machine according to claim 4, wherein
the a center of the an inner circumference of the cylinder chamber (50) is deviated
from the a center of the outer circumference of the cylinder chamber (50) when viewed ~~in~~
~~plan~~ along a longitudinal axis of the cylinder chamber.

6. (Currently Amended) The rotary fluid machine according to claim ~~1~~ or 3,
wherein
the cylinder chamber (50) is divided into four regions along the circumference thereof
such that the cylinder chamber (50) has wide regions (~~Z1, Z3~~) and narrow regions (~~Z2, Z4~~)
formed in a continuous and alternate manner.

7. (Currently Amended) The rotary fluid machine according to claim 2 ~~or~~ 3,
wherein
the piston (22) and the blade (23) make relative swings at a predetermined swing
center, and
~~regarding~~ the swing center of the blade (23) and the piston (22) ~~as is~~ is a starting point
of the circumference of the piston (22), the a width ~~T2~~ of a part of the piston (22) ranging
from the starting point to a point at a rotation angle of 180° from the starting point is small
and the a width ~~T2~~ of the ~~other~~ another part of the piston (22) ranging from the 180° point to
a point at a rotation angle of 360° from the starting point is large.

8. (Currently Amended) The rotary fluid machine according to claim 7, wherein
the a center of the an inner circumference of the piston (22) is deviated from the a
center of the outer circumference of the piston (22) when viewed ~~in plan~~ along a longitudinal
axis of the piston.

9. (Currently Amended) The rotary fluid machine according to claim 2 ~~or 3~~,
wherein
the piston (22) and the blade (23) make relative swings at a predetermined swing
center and

the piston (22) is divided into four regions along the circumference thereof such that
the piston (22) has narrow regions (~~W1, W3~~) and wide regions (~~W2, W4~~) formed in a
continuous and alternate manner.

10. (Currently Amended) The rotary fluid machine according to claim 1, wherein
~~part of the annular piston (22) of the rotation mechanism (20) is cut off such that the~~
~~piston (22) is C-shaped to form a gap,~~

the blade (23) ~~of the rotation mechanism (20)~~ extends from the an inner wall surface
to the an outer wall surface of the cylinder chamber (50) and passes through the ~~cut-off~~
~~portion gap~~ of the piston, (22) and

a swing bushing is provided in the ~~cut-off portion gap~~ of the piston (22) to contact the
piston (22) and the blade (23) via the surfaces thereof such that the blade (23) freely
reciprocates and the blade (23) and the piston (22) make relative swings.

11. (New) The rotary fluid machine according to claim 1, wherein
the blade has a center line that is a starting point of the circumference of the cylinder chamber, a width of a part of the cylinder chamber ranging from the starting point to a point at a rotation angle of 180° from the starting point is large and a width of another part of the cylinder chamber ranging from the 180° point to a point at a rotation angle less than 360° from the starting point is small.

12. (New) The rotary fluid machine according to claim 11, wherein
a center of an inner circumference of the cylinder chamber is deviated from a center of the outer circumference of the cylinder chamber when viewed along a longitudinal axis of the cylinder chamber.

13. (New) The rotary fluid machine according to claim 3, wherein
the cylinder chamber is divided into four regions along the circumference thereof such that the cylinder chamber has wide regions and narrow regions formed in a continuous and alternate manner.

14. (New) The rotary fluid machine according to claim 3, wherein
the piston and the blade make relative swings at a predetermined swing center, and
the swing center of the blade and the piston is a starting point of the circumference of the piston, a width of a part of the piston ranging from the starting point to a point at a rotation angle of 180° from the starting point is small and a width of another part of the piston

ranging from the 180° point to a point at a rotation angle of 360° from the starting point is large.

15. (New) The rotary fluid machine according to claim 14, wherein
a center of an inner circumference of the piston is deviated from a center of the outer
circumference of the piston when viewed along a longitudinal axis of the piston.

16. (New) The rotary fluid machine according to claim 3, wherein
the piston and the blade make relative swings at a predetermined swing center, and
the piston is divided into four regions along the circumference thereof such that the
piston has narrow regions and wide regions formed in a continuous and alternate manner.